

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NO. 48010-1000 USPC U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/520,780
INTERNATIONAL APPLICATION NO. PCT/US2003/022165	INTERNATIONAL FILING DATE July 14, 2003	PRIORITY DATE CLAIMED July 12, 2002
TITLE OF INVENTION MUTATIONS OF VOLTAGE-GATED ION CHANNELS THAT ALLOW THEM TO EXPRESS A VOLTAGE-INDEPENDENT PHENOTYPE AND AN IMPROVED METHOD TO USE THE SAME		
APPLICANT(S) FOR DO/EO/US David FEDIDA and David STEELE		
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. 2. <input checked="" type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <p>Items 11 to 20 below concern document(s) or information included:</p> <ol style="list-style-type: none"> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment regarding sequence listing. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76 15. <input type="checkbox"/> A substitute specification. 16. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter. 17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information: Statement Under 37 CFR 3.73(b); Copy of Assignment; Sequence Listing (6 pages); Declaration re Sequence Listing; Copy of Sequence Listing on CD; Copy of Notice of Missing Requirements 		

U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/520,780	INTERNATIONAL APPLICATION NO. PCT/US2003/022165	ATTORNEY'S DOCKET NUMBER 4425USPC		
The following fees are submitted				
21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a)) \$300.00		\$.00		
22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by the IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00				
All other situations \$200.00		\$.00		
23. <input type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by the IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00				
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority \$100.00				
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB \$400.00				
All other situations \$500.00		\$.00		
TOTAL OF 21, 22 AND 23 =		\$.00		
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.				
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE	
- 100 =	/50 =		X \$250.00	\$.00
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$.00
Claims	Number Filed	Number Extra	Rate	
Total Claims	- 20 =		x \$ 50.00	\$.00
Independent Claims	- 3 =		x \$ 200.00	\$.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$.00
TOTAL OF ABOVE CALCULATIONS =				\$.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				\$.00
SUBTOTAL =				\$.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).			+ \$.00	
TOTAL NATIONAL FEE =				\$.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property			+ \$.00	
TOTAL FEES ENCLOSED =				\$.00
Amount to be refunded:				
Amount to be Charged:				
a. <input type="checkbox"/> A check in the amount of \$ ____ to cover the above fees is enclosed.				
b. <input type="checkbox"/> Please charge my Deposit Account No. 19-1090 in the amount of \$ ____ to cover the above fees. A duplicate copy of this sheet is enclosed.				
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any deficiency in the basic national fee which may be required, or credit any overpayment to Deposit Account No. 19-1090 . A duplicate copy of this sheet is enclosed.				
d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.				

SEND ALL CORRESPONDENCE TO:

Carol J. Roth, Esq.
Seed Intellectual Property Law Group PLLC
701 5th Avenue, Suite 6300
Seattle, WA 98104-7092
United States of America
(206) 622-4900

Carol J. Roth
SIGNATURE
Carol J. Roth
NAME
32,783
REGISTRATION NUMBER

EX-146 MAIL NO. EV529783461US
 Rec'd PCT/PTO 12 SEP 2005



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/520,780	David Fedida	480102.425USPC

500
 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC
 701 FIFTH AVE
 SUITE 6300
 SEATTLE, WA 98104-7092

RECEIVED

JUL 18 2005

Date Mailed: 07/12/2005

SEED INTELLECTUAL PROPERTY
 LAW GROUP PLLC

INTERNATIONAL APPLICATION NO.

PCT/US03/22165

IA. FILING DATE	PRIORITY DATE
-----------------	---------------

07/14/2003	07/12/2002
------------	------------

CONFIRMATION NO. 9955
 371 FORMALITIES LETTER



OC00000016410880

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 01/10/2005
- Copy of the International Search Report filed on 01/10/2005
- Copy of IPE Report filed on 01/10/2005
- Biochemical Sequence Listing filed on 01/10/2005
- U.S. Basic National Fees filed on 01/10/2005
- Priority Documents filed on 01/10/2005

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE

DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

MAMIE P PERSON

Telephone: (703) 308-9140 EXT 227

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/520,780	PCT/US03/22165	480102.425USPC

FORM PCT/DO/EO/905 (371 Formalities Notice)